

Safety: Stay Out – Stay Alive!

Each year people, pets, and other animals are killed or injured in an abandoned mine in the United States. Reports from mine rescue groups and the media tracked by the Division of Mine Reclamation (DMR) include stories of people of all ages who fell into mine shafts, died from lack of oxygen, or were otherwise hurt in an abandoned mine accident while hiking, dog walking, riding off highway vehicles, or recreating near their homes. Such accidents also put trained rescue personnel at risk.



Department staff promoting safety at abandoned mines. Photo: DOC

Frequently Asked Questions

1. How do I report an abandoned mine?

Call DMR on our toll-free hotline at **1-877-OLD-MINE (1-877-653-6463)** or email us at DMR@conservation.ca.gov. Include the location (e.g., GPS point with latitude and longitude, name of nearest road, etc.) and description of the mine site or feature.

In an emergency situation, call 911 or contact your local sheriff's office. If someone is injured due to a fall or is trapped in an abandoned mine, do not try to rescue the victim yourself. Rescue attempts should only be made by professionals with proper training and equipment to avoid further injury to the victim or yourself.

2. Are abandoned mines dangerous?

Yes! Many mines in California that are now abandoned date back to the Gold Rush, were temporary by their nature, and can be an irresistible, and sometimes deadly, draw for children and adults. For the explorer, hiker, off-roader, or rockhound, abandoned mine hazards are not always apparent. Reasons why abandoned mines are dangerous include, but are not limited to, the following.

- Miners compensated for the loss of structural integrity caused by removing rock from a mine, by adding support inside mines as needed. Horizontal abandoned mine openings may seem sturdy but rotting timbers and unstable rock formations make cave-ins a real danger. Internal workings such as winzes, drifts, and stopes may present falling hazards. Darkness and debris add to the hazards and can disorient visitors, leaving them lost underground.
- Vertical shafts can be hundreds of feet deep. At the surface, they may be unprotected, hidden by vegetation, or covered by rotting boards.
- Blasting caps or dynamite left behind can be extremely unstable and may detonate at any time.
- Visitors to an abandoned mine may encounter pockets of oxygen-depleted air or lethal gas (such as carbon monoxide) that can cause asphyxiation.

- Dust particles originating from abandoned mine sites may cause health problems due to naturally-occurring elements such as asbestos, arsenic, or chromium, or diseases such as hantavirus or valley fever.
- Abandoned mines are often used as habitat by wildlife, including rattlesnakes.
- Chemical and environmental hazards created by mines can pose health threats to visitors, the public at large, and wildlife. Water in a mine can react with sulfide-bearing rock to produce acid-generating conditions. This acid-bearing water can leach heavy metals from rock, creating acid rock drainage. Visitors can also be exposed to high levels of toxic waste left over from the processing of ore.

3. How many people have been hurt or killed at abandoned mine sites in California?

Because many accidents and near misses go unreported, the number of people injured or killed in abandoned mine accidents each year is likely lower than reported. The data compiled below are based on available records (the oldest DMR record is from 1947).

<u>Decade</u>	<u># Fatality</u>	<u># Injury/Near Miss</u>	<u>Decade</u>	<u># Fatality</u>	<u># Injury/Near Miss</u>
2011-2020	6	11	1971-1980	17	46
2001-2010	18	35	1961-1970	13	53
1991-2000	7	49	1951-1960	<u>9</u>	<u>46</u>
1981-1990	7	20	TOTAL	77	260

4. What role does DMR have in making abandoned mine sites less hazardous?

DMR's Abandoned Mine Lands Unit (AMLU) inventories abandoned mines and has partnered with [multiple state, federal, and local landowning and land management agencies and nongovernmental groups](#) to remediate thousands of hazardous shafts and adits (vertical and horizontal openings) statewide, thus making public lands safer for residents and recreationists. Mine remediations typically target hazardous sites near homes and high visitation areas such as campgrounds, trails, and Off Highway Vehicle parks. Sources of funding to remediate abandoned mines include state fees collected on gold and silver mined in California, federal funds, and other special funds. [AMLU projects](#) include fences, backfills, polyurethane foam closures, a variety of gates and other structures that allow access for bats that use abandoned mines for habitat or shelter while keeping humans safely out, and debris cleanups. These projects are often completed by small businesses under contract to the AMLU. The AMLU also promotes safety at abandoned mine sites by encouraging the public to **Stay Out – Stay Alive!**

5. What is Stay Out – Stay Alive?

Stay Out – Stay Alive is a national public awareness campaign aimed at warning children and adults about the dangers of exploring and playing on active and abandoned mine sites. Launched by the federal Mine Safety and Health Administration (MSHA) in 1999, the campaign is a partnership of agencies, private organizations, businesses, and individuals. In 2008, DMR and MSHA collaborated on a DVD containing personal stories revealing the dangers of abandoned mines in California (see these stories at <https://arlweb.msha.gov/streaming/SOSA.asp>). For more information, visit MSHA's website at <https://www.msha.gov/sosa>.



Accident Summaries

Below are summaries of reports of fatal and non-fatal incidents on abandoned mine lands in California in the past 20 years. The list provides a representative sample to illustrate the potential dangers of abandoned mines. Remember: **Stay Out – Stay Alive!**

Representative sample of abandoned mine accidents in California from 2001-2020 (Source: DOC data obtained from media articles and mine rescue group reports)

(F = Female, M = Male, unk = unknown)

Date	County	Summary	#/Sex	Age
3/20/2020	Inyo	The San Bernardino Mine/Cave Rescue Team and rescuers from Inyo County and Nevada rescued a man who fell 80 feet down a 100-foot-deep shaft in Death Valley. The man suffered head injuries.	1 M	60
3/7/2020	San Bernardino	County Fire crews and search and rescue teams rescued a man 15 hours after he was stuck 900 feet into an abandoned mine he was exploring.	1 M	unk
11/3/2018	San Bernardino	A man exploring with friends was injured after falling about 100 feet into a shaft. County Sheriff volunteers rescued him.	1 M	unk
6/6/2018	El Dorado	County firefighters rescued a lost dog, which was found in a 50-foot-deep shaft.		
3/27/2017	Tuolumne	The County Sheriff's Search and Rescue Team rescued a dog from a 40-foot-deep shaft located on a college campus.		
12/24/2016	Tuolumne	Hikers found the remains of a man in a mine shaft. The Mount Dimas Mountain Rescue team recovered the body. Foul play was ruled out.	1 M	58
4/3/2016	Nevada	A County firefighter rescued a dog that fell into a 30-foot airshaft near the owner's home.		
1/1/2016	San Bernardino	The County Fire Department rescued a boy who fell down a shaft.	1 M	14
10/25/2015	El Dorado	A man died when he fell from a 150-foot highwall at an abandoned placer mine.	1 M	19
9/29/2015	Placer	A County sheriff dive team recovered the body of a man from an old quarry.	1 M	26
1/26/2015	Tuolumne	A U.C. Davis veterinary crew rescued a 1,200-pound cow from a 35-foot-deep shaft.		
9/26/2014	Nevada	A man on his ATV fell about 30 feet into a shaft. He was rescued and treated for moderate injuries.	1 M	70

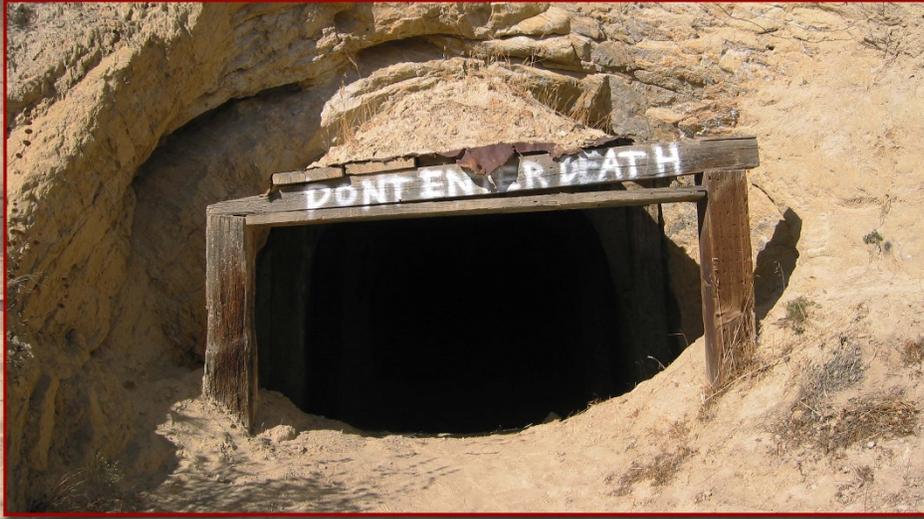
Date	County	Summary	#/Sex	Age
2/26/2014	Placer	A teenager died after falling from a 250-foot highwall at an abandoned placer mine.	1 M	17
11/5/2013	Mariposa	One of two men exploring an abandoned mine was pinned when the shaft collapsed around him.	1 M	61
10/23/2013	San Bernardino	The County Fire Department rescued a lost dog found 25 feet down a shaft.		
4/9/2012	Kern	A man entrapped in an open pit while mining for gold at an abandoned mine site was rescued by County firefighters and other agencies.	1 M	unk
11/ /2011	Tuolumne	A volunteer firefighter checking a recently extinguished fire in a recreation area fell through brush hiding a mine shaft. He was rescued with ankle, hip, and back injuries.	1 M	unk
6/6/2011	Amador	A mother contacted DMR after her son fell into an abandoned mine shaft on her property. Her son was playing in a shed built over the 20-foot-deep, 7-foot-wide shaft when the floorboards broke.	1 M	unk
4/11/2011	Riverside	A hiker reported a vehicle that was stuck 60 feet down a shaft.	unk	unk
4/9/2011	Tuolumne	Four men went scuba diving in a flooded abandoned quarry. One man returned to the surface with help but later died; another drowned.	2 M	unk
1/29/2011	San Bernardino	A man fell 50 feet into a 100-foot-deep shaft after climbing over a fence, breaching a locked hatch, and climbing down a 40-year-old wooden ladder that broke. He had head, rib, and knee injuries.	1 M	34
11/27/2010	Kern	A teen fell into a 30-foot-deep shaft and fractured his spine.	1 M	17
11/7/2009	Kern	One of four friends riding bikes fell 12 feet into a shaft. He was rescued complaining of back, neck, shoulder, and ankle pains.	1 M	unk
11/1/2009	Kern	A woman died after falling 100 feet into a winze. She reportedly visited the abandoned mine with 3 adults and 2 children and was looking down the winze when the ground gave way, and she fell.	1 F	30
7/19/2009	Inyo	A man died after falling off a highwall of a large abandoned mine pit.	1 M	22

Date	County	Summary	#/Sex	Age
3/2009	Kern	A man fell into a shaft and rescued himself.	1 M	20
1/21/2009	Tuolumne	Rescuers helped a dog out a 40-foot-deep shaft.		
1/17/2009	San Bernardino	A boy out with a group rode his trail bike into a 20-foot-deep shaft and injured his left arm.	1 M	15
12/22/2008	Calaveras	Rescuers pulled a sheep from an old mine pit.		
11/23/2008	Ventura	A man fell 50 feet while exploring an abandoned mine. He died later from his injuries.	1 M	79
11/22/2008	Placer	Park rangers found a deer in a shaft.		
8/16/2008	Tuolumne	A man walked 20 feet into an old mine and fell 100 feet down a series of winzes into a pool of water. After one rescue attempt failed, the Los Angeles Sheriff's Mine Rescue team extracted him 42 hours later. He had back and leg injuries.	1 M	34
5/17/2008	Madera	Three men died from carbon monoxide poisoning in an abandoned gold mine they had dewatered and were exploring.	3 M	23, 25, 26
1/21/2008	Placer	Auburn Fire Department firefighters rescued a dog from a 40-foot-deep shaft hidden in undergrowth near a popular trail.		
12/31/2007	Kern	A boy taking pictures inside an abandoned mine fell 30 to 50 feet down a winze breaking several bones. About 20 rescuers responded.	1 M	11
10/2007	Kern	An abandoned SUV was found lodged in the collar of a 30-foot-deep shaft.	unk	unk
6/16/2007	Plumas	A man died after he was thrown from his motorcycle on a trail at an abandoned quarry.	1 M	41
1/2007	Kern	A woman nearly drove her quad into a 500-foot-deep shaft; after riding up a "hill" (waste rock), her front wheels rolled off the shaft's edge.	1 F	unk
12/24/2006	Kern	A boy who fell with his motorcycle 40 feet into a shaft was hospitalized after County firefighters and the County Sheriff's Department rescued him.	1 M	9
7/25/2006	El Dorado	Two workers pumping water from an abandoned mine to a water tanker and their two dogs died after becoming overcome by the pump's fumes.	1 M 1 F	49, 32

Date	County	Summary	#/Sex	Age
7/23/2006	Calaveras	Foothill Fire Protection District volunteers rescued a calf from 65-foot-deep shaft.		
4/30/2006	Riverside	A man on an off-road vehicle fell 40 feet down a shaft ; 18 firefighters worked nearly 7 hours to rescue him. The man had arm, leg, and possible internal injuries.	1 M	27
4/21/2006	Placer	A man was killed when a sinkhole opened under his basement apartment, snapping the foundation and burying him with debris.	1 M	32
4/14/2006	San Bernardino	A man fell into the same shaft that a man died in 1 week earlier. About 60 emergency workers rescued him. He broke both ankles, a leg, and vertebrae, and was paralyzed below the waist.	1 M	34
4/7/2006	San Bernardino	A man died after walking into an adit and falling 50 feet down an internal shaft. He and his son (6) were riding OHVs a campground.	1 M	41
3/12/2006	Imperial	The Yuma Fire Department and other agencies rescued two men 40 hours after they drove an SUV into a shaft and fell 25 to 30 feet. The driver broke an arm; his passenger had nicks and cuts.	2 M	62, 67
3/1/2006	Kern	A cattle rancher and his horse nearly fell into a collapsed abandoned mine tunnel that was 2 feet below ground. Rains had weakened the tunnel roof causing a 6-foot-deep, 6-foot-across hole.	1 M	unk
2/7/2006	San Bernardino	Trona Fire Department firefighters rescued a dog from a shaft.		
1/11/2016 & 12/29/2015	Alameda	Two weeks after a pickup truck driver slid off the edge of an old quarry, another driver crashed in the same quarry. No injuries were reported.	2 M	23, unk
3/25/2005	Kern	The Indian Wells Valley Search and Rescue team and other local agencies rescued two men from a 40-foot-deep shaft. One man had head, arm and knee injuries; the other man was unhurt.	2 M	28, 26
12/2004	Kern	A family driving on a dirt road nearly backed their car into a 53-foot-deep shaft on the side of the road (a tire was hanging over the shaft edge).	1 M 2 F	unk, unk, 36

Date	County	Summary	#/Sex	Age
11/14/2004	San Bernardino	A man riding a motorcycle died after he rode up a steep mine dump and fell 700+ feet down an open shaft. The rider following behind barely stopped his motorcycle before also going into the shaft; he grabbed a bush and pulled himself out.	2 M	21
4/19/2004	Riverside	A teenager suffered head injuries after falling 50 feet into an abandoned rock quarry.	1 F	16
2/14/2004	Kern	A boy on his dirt bike fell into a 40-foot-deep shaft. The boy's father and other off-roaders rescued him. He was shaken and bruised.	1 M	11
11/28/2003	Kern	A boy out with his family fell 30 feet down a winze inside an adit. County and California City firefighters rescued him. He was uninjured.	1 M	13
10/11/2003	Del Norte	A man died and his son was injured after their off-road vehicle drove into an air shaft.	2 M	19, unk
4/15/2003	Butte	A dog was rescued about 8 weeks after it fell into a 50-foot-deep shaft.		
3/17/2003	Kern	A man and his motorcycle fell 50 feet into an abandoned mine shaft. County and California City firefighters rescued him. He had minor injuries.	1 M	32
1/7/2003	San Bernardino	A boy fell on his motorcycle 25 feet into a shaft His father rescued him. He had minor injuries.	1 M	14
6/24/2002	Orange	Two brothers died after they swam through a flooded portion of a mine they were exploring. Orange and Los Angeles County sheriff's department cave divers found the air where the bodies were found contained only 4% oxygen.	2 M	18, 23
5/26/2002	Kern	A boy riding a motorcycle fell 200 feet after breaking through planks covering an abandoned mine shaft. He was rescued by the County Fire Department and airlifted to a hospital.	1 M	10
8/4/2001	El Dorado	Two men were in a senior's complex when the hillside below gave way exposing a tunnel from a historic mine under the home that extended into the hill. The men were uninjured.	2 M	unk
6/2/2001	San Diego	A boy drowned in an old quarry swimming hole that was cordoned off due to its dangers.	1 M	16

STAY OUT - STAY ALIVE!



1-877-OLD-MINE

PLEASE CALL TO REPORT HAZARDOUS ABANDONED MINES

Department of Conservation - Division Of Mine Reclamation - Abandoned Mine Lands Unit



DMR abandoned mine safety poster